

B1 Heterogeneous Parallelism on a Multithreaded Multiprocessor," 1992, which can be found at KSK  
8-30-02  
 web site ~~www~~tera.com/www/archives/library/psdocs.html.

Please replace the paragraph at page 4, lines 16 through 23 with the following paragraph:

B2 Many papers have been published about Simultaneous Multithreading. For a fairly complete list, see <sup>web site</sup> ~~www~~cs.washington.edu/research/smt/. The University of Washington has done much work on efficient synchronization on SMT. See, for example, "Supporting Fine-Grained Synchronization on a Simultaneous Multithreading Processor," 1995, available at <sup>web site</sup> ~~www~~cs.washington.edu/research/smt/papers/hpca.ps. A longer version of the paper, UCSD CSE Technical Report #CS98-587, is available at <sup>web site</sup> ~~www~~cs.washington.edu/research/smt/papers/smt.synch.ps.

Please replace the paragraph at page 11, lines 20 through 24 with the following paragraph:

B3 Executing a LDx\_ARM on one TPU does not affect any architecturally visible state on another TPU, and in particular cannot clear another TPU's watch\_flag, causing the quiescing processor to come out of a quiescent state. Without this restriction, two processors executing LDQ\_ARM/QUIESCE sequences could be continually re-arming each other.

Amendments to the specification are indicated in the attached "Marked Up Version of Amendments" (pages i - ii).

#### In the Claims

Please cancel Claims 11 and 39.

Please amend Claims 1, 13, 18, 22, 26, 31, 45, 49 and 50. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages ii - iv).